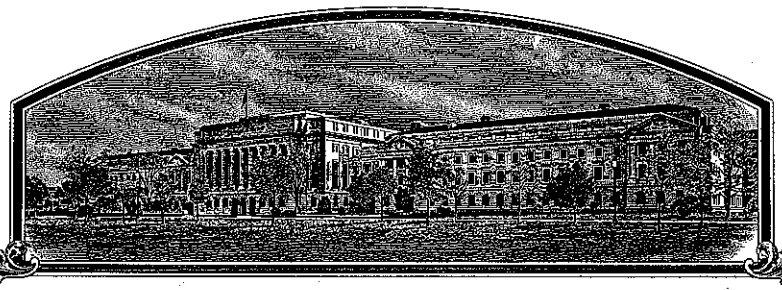
No. 200400246



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Seminis Vegetable Seeds, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR PORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT D BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

LETTUCE

'PS 06515293'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this fifth day of February, in the year two thousand and eight.

Attest:

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Secretary of Agriculture

REPRODUCE LOCALLY. *Include form number and date on all reproductions* — Form Approved - OMB No. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF OWNER
Seminis Vegetable Seeds, Inc.

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME
PS 06515293

3. VARIETY NAME
PS 06515293 PER LETTER LAW 9/21/07

4. ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)*
2700 Camino del Sol
Oxnard, CA 93030-7967

5. TELEPHONE *(include area code)*
(805) 647-1572

6. FAX *(include area code)*
(805) 918-2545

FOR OFFICIAL USE ONLY

PVPO NUMBER
200400246

FILING DATE
JUNE 28, 2004

7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION *(corporation, partnership, association, etc.)*
Corporation

8. IF INCORPORATED, GIVE STATE OF INCORPORATION
California

9. DATE OF INCORPORATION
4-Jun-1962

10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. *(First person listed will receive all papers)*

Sharen Chaffin
Seminis Vegetable Seeds, Inc.
37437 State Hwy 16
Woodland CA 95695

Marcel Bruins
Seminis Vegetable Seeds, Inc.
Nude 54D
6702 DN Wageningen
The Netherlands
marcel.bruins@seminis.com
PH: 31 317 450218; FX 31 317 450217

FEES RECEIVED

FILING AND EXAMINATION FEES:
$ 3652.00
DATE 6/28/2004

CERTIFICATION FEE:
$ 768.00
DATE 12/17/2007

11. TELEPHONE *(Include area code)*
(530) 669-6172

12. FAX *(Include area code)*
(530) 666-4426

13. E-MAIL
sharen.chaffin@seminis.com

14. CROP KIND *(Common Name)*
Lettuce

15. GENUS AND SPECIES NAME OF CROP
Lactuca Sativa L.

16. FAMILY NAME *(Botanical)*
Asteraceae

17. IS THE VARIETY A FIRST GENERATION HYBRID?
☐ YES ☑ NO

18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse)

a. ✓ Exhibit A. Origin and Breeding History of the Variety
b. ✓ Exhibit B. Statement of Distinctness
c. ✓ Exhibit C. Objective Description of Variety
d. Exhibit D. Additional Description of the Variety *(Optional)*
e. ✓ Exhibit E. Statement of the Basis of the Owner's Ownership
f. ✓ Voucher Sample *(2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository)*
g. ✓ Filing and Examination Fee ($3,652), made payable to "Treasurer of the United States" *(Mail to the Plant Variety Protection Office)*

19. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? *See Section 83(a) of the Plant Variety Protection Act)*
☐ YES *(If "yes", answer items 20 and 21 below)* ☑ NO *(If "no", go to item 22)*

20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES? ☐ YES ☐ NO
IF YES, WHICH CLASSES? ☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED

21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? ☐ YES ☐ NO
IF YES, SPECIFY THE NUMBER 1,2,3, etc. FOR EACH CLASS.
☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED
(If additional explanation is necessary, please use the space indicated on the reverse.)

22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES?
☐ YES ☑ NO
IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. *(Please use space indicated on reverse.)*

23. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT *(PLANT BREEDER'S RIGHT OR PATENT)*?
☐ YES ☑ NO
IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. *(Please use space indicated on reverse.)*

24. The owners declare that a viable sample of basic seed of the variety has been furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.

The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Owner(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF OWNER	SIGNATURE OF OWNER
Sharen Chaffin	
NAME *(Please print or type)* Sharen Chaffin	NAME *(Please print or type)*
CAPACITY OR TITLE: IP Specialist	DATE: 6-24-04
CAPACITY OR TITLE	DATE

INSTRUCTIONS 20040246

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), **ALL** of the following items must be **received** in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to **reproduce** the variety, or for tuber reproduced varieties verification that a viable *(in the sense that it will reproduce an entire plant)* tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for $3,652 ($432 filing fee and $3,220 examination fee), payable to "Treasurer of the United States" *(See Section 97.6 of the Regulations and Rules of Practice.)* Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. **DO NOT** use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of $432 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office
Telephone: (301) 504-5518
FAX: (301) 504-5291
Homepage: http://www.ams.usda.gov/science/pvpo/pvp.htm

ITEM

18a. Give:
(1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
(2) the details of subsequent stages of selection and multiplication;
(3) evidence of uniformity and stability; and
(4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified

18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:

(1) identify these varieties and state all differences objectively;
(2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
(3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.

18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.

18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, *etc.*

18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.

19. If "Yes" is specified *(seed of this variety be sold by variety name only, as a class of certified seed)*, the applicant **MAY NOT** reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. *(See Regulations and Rules of Practice, Section 97.103).*

22. *See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.*

23. *See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.*

21. CONTINUED FROM FRONT *(Please provide a statement as to the limitation and sequence of generations that may be certified.)*

22. CONTINUED FROM FRONT *(Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)*

23. CONTINUED FROM FRONT *(Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)*

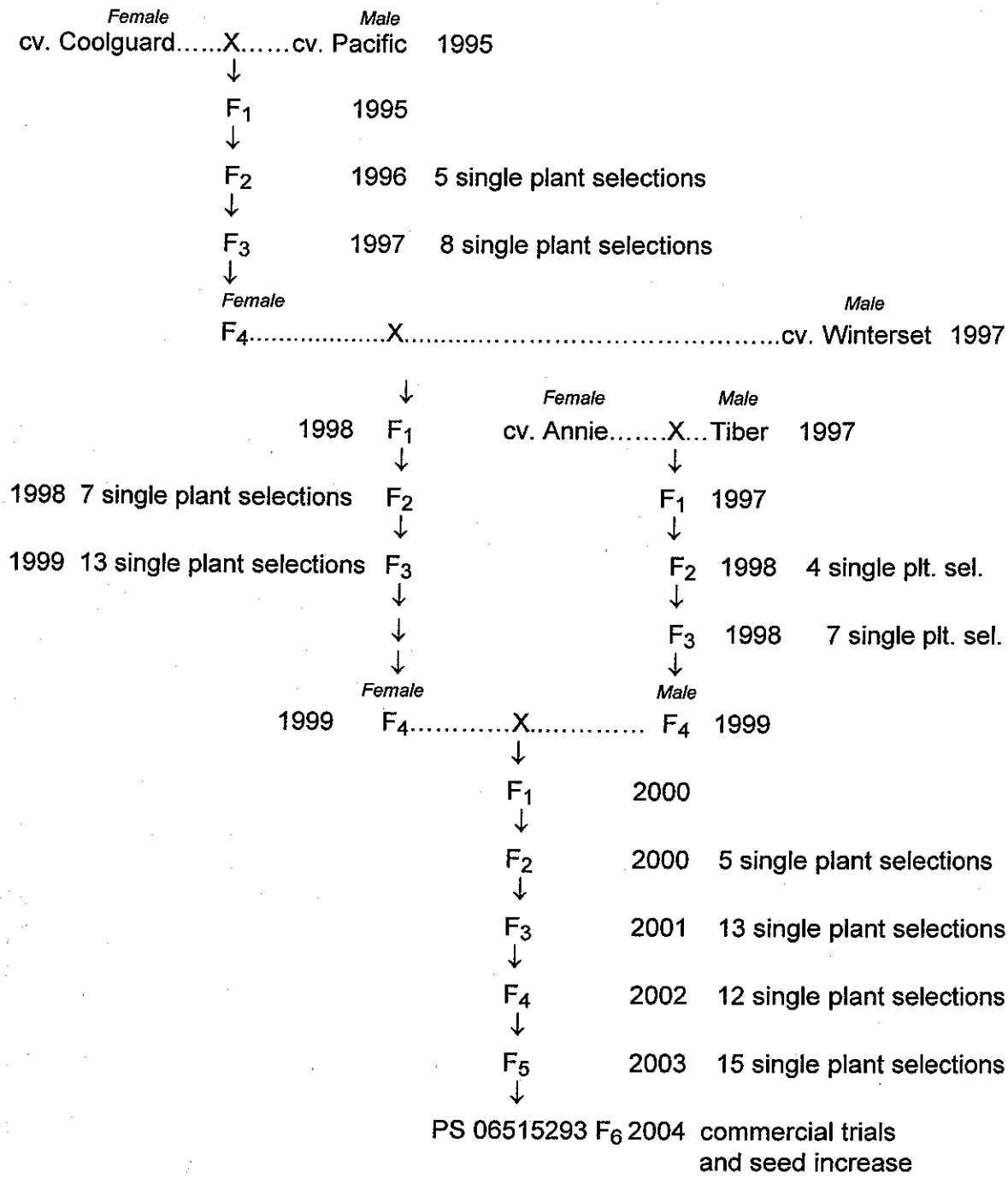
NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. *(See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)*

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center--East, Beltsville, MD 20705. Telephone: (301) 504-8089. http://www.ams.usda.gov/lsg/seed.htm

ST-470 (02-10-2003) designed by the Plant Variety Protection Office with Word 2000. Replaces former versions of ST-470, which are obsolete.

Exhibit A. Origin and Breeding History of Lettuce PS 06515293

Pedigree of PS 06515293



PS 06515293 originated in 1995 with the cross cv. Coolguard by cv. Pacific. An F_4 selection from this cross was then crossed to cv. Winterset in 1997. An F_4 selection from that cross was then crossed to an F_4 selection from the cross cv. Annie by cv. Tiber in 1999. Single plant selections were then made in subsequent years in the areas of intended commercialization. By F_5 a group of 15 plants were judged uniform and bulked for trialing and seed increase. An F_6 mass was trialed during the winter/spring of 2004 and a seed increase will be produced in the San Joaquin Valley this year.

The breeding work was carried out by Dr. William Waycott at the Seminis Vegetable Seed's Research Station at Arroyo Grande, California. Replicated field trials were conducted in production areas throughout the Desert Southwest of North America during winter/spring 2004.

The breeding method employed was pedigree selection, using both single plant selection and mass selection practices. The selection criteria for PS 06515293 were to establish a cultivar with increased uniformity, improved heading ability, coupled with partial resistance to the lettuce bigvein virus, when compared to the most similar variety, cv. Red Coach 74.

In trials of PS 06515293 the last three years covering generations F_6 to F_8, we have seen neither genetic variants nor off-types in more than 3,500 plants, indicating that this variety is genetically uniform and stable.

Exhibit B. Novelty Statement of Lettuce PS 06515293

PS 06515293 is described as a vigorous crisphead lettuce cultivar adapted to the Desert Southwest area of North America. Its optimum sowing period is from 1 to 30 November in western Arizona and Southern California. The optimum sowing period for the San Joaquin Valley of California is still being determined. PS 06515293 was selected for improved uniformity and performance, coupled with partial resistance to the lettuce bigvein virus, compared to the currently commercial cultivars grown during these production periods.

Phenotypically, PS 06515293 is distinct from its most similar variety, cv. Red Coach 74 in plant size, head size, and head weight.

In field tests in 2004, PS 06515293 was slightly smaller in size (plant diameter: 45.0 cm vs. 50.7 cm and head diameter: 16.3 cm vs. 17.5 cm) and lighter in weight (1016 g vs. 1108 g) than cv. Red Coach 74, yet had a more appealing appearance (smoother bottom appearance with less pronounced ribs, as measured by rib thickness) (10 mm vs. 18 mm), and a much improved uniformity of heading (Table 1). It also exhibited partial resistance to the lettuce bigvein virus (2.25 of 20 plants with symptoms vs. 18.5 of 20).

In replicated field trials, PS 06515293 consistently exhibited more plants with rounder, firmer heads, while heads of cv. Red Coach 74 exhibited less uniformity of heading with several plants exhibiting soft or misshapen heads. PS 06515293 consistently revealed less symptoms of the lettuce bigvein virus while most of the heads of cv. Red Coach 74 showed the symptoms. Symptoms of the lettuce bigvein virus include a lack of tight head formation, a more erect growth habit of the cap leaves, and an increase in width of the veins so that the color of the cap leaves is changed due to the pronounced, larger, and wider veins. Head formation is normally delayed by the presence of the virus, causing the plant to remain open headed. The presence of symptoms reduces the commercial value of the product due not only to poor head formation, but also to the unsightly outer leaves that are thicker and rougher looking, with larger and wider veins. When severe, the virus can be detected on the inner leaves as well, creating an unsightly product then chopped for salad.

The data presented here are statistically different at the 95% confidence level, exhibiting a range of means for plant diameter from 44.72 to 45.14 for PS 06515293 and from 50.35 to 50.95 for cv. Red Coach 74, of means for head diameter from 16.05 to 16.45 for PS 06515293 and from 17.24 to 17.71 for cv. Red Coach 74, and of means for head weight from 1014.39 to 1017.61 for PS 06515293 and from 1106.01 to 1109.49 for cv. Red Coach 74, using the 0.95 probability of generating confidence intervals (CI) that contains the means.

Table 1. Evaluation of PS 06515293 and the most similar cultivar, cv. Red Coach 74, for several important characters.

Trial No	Cultivar	Rep No.	Bottom Rib thick-ness[a]	Plant Diam.[b]	Head Diam.[c]	Head Weight[d]	Presence of Lettuce bigvein Virus symptoms[e]
Trial 1: Evaluated 26 Feb 2004 Yuma, AZ	**PS 06515293:**	Rep. 1	9±0.3	44.7±1.0	16.2±1.1	984±7.5	3 of 20 with symptoms
		Rep. 2	10±0.4	45.5±0.9	16.5±1.0	1032±7.1	2 of 20 with symptoms
		Average:	10±0.4	45.1±1.0	16.4±1.0	1008±7.3	2.5 of 20 with symptoms
	cv. Red Coach 74:	Rep. 1	17±0.4	50.7±1.3	17.3±1.1	1122±7.7	20 of 20 with symptoms
		Rep. 2	16±0.5	51.6±1.2	17.2±1.3	1101±7.9	17 of 20 with symptoms
		Average:	17±0.5	51.2±1.3	17.3±1.2	1112±7.8	19 of 20 with symptoms
Trial 2: Evaluated 15 Feb 2005 Bard, CA	**PS 06515293:**	Rep. 1	12±0.2	42.1±0.8	14.4±0.8	954±6.8	4 of 20 with symptoms
		Rep. 2	10±0.2	44.7±0.7	14.4±0.9	998±7.0	4 of 20 with symptoms
		Average:	11±0.2	43.4±0.8	14.4±0.9	976±6.9	4 of 20 with symptoms
	cv. Red Coach 74:	Rep. 1	17±0.4	47.3±1.1	17.5±0.9	1034±7.4	17 of 20 with symptoms
		Rep. 2	16±0.3	49.0±1.0	18.8±0.7	1022±7.5	20 of 20 with symptoms
		Average:	17±0.4	48.2±1.1	18.2±0.8	1028±7.5	19 of 20 with symptoms
Range of variation among means of statistically significant differences at the 95% level using the confidence interval [CI = mean ± (SDXSE)]:							
	PS 06515293		**10.19 to 10.31**	**44.06 to 44.44**	**15.16 to 15.59**	**990.40 to 993.60**	**3.0 to 3.5**
	cv. Red Coach 74		**16.41 to 16.59**	**49.39 to 49.90**	**17.48 to 17.92**	**1068.30 to 1071.70**	**18.3 to 18.7**

[a] Mean rib thickness measured 50 cm from the point of attachment to the stem using two sowing dates of 20 plants per replication in mm ± standard deviation.

[b] Mean plant diameter using two sowing dates of 20 plants per replication in cm ± standard deviation.

[c] Mean head diameter using two sowing dates of 20 plants per replication in cm ± standard deviation.

[d] Mean head weight using two sowing dates of 20 plants per replication in grams ± standard deviation.

[e] Presence of the lettuce bigvein virus symptoms using two replications of 20 plants each.

9

#20040046

REPRODUCE LOCALLY. Include form number and date on all reproductions. Form Approved - OMB No. 0581-0055

EXHIBIT C
(Lettuce)

U. S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705

OBJECTIVE DESCRIPTION OF VARIETY
LETTUCE (*Lactuca sativa* L.)

NA

AD Seminis Vegetable Seeds, Inc.
2700 Camino del Sol
Oxnard, CA 93030-7967

FOR OFFICIAL USE ONLY

PVPO NUMBER 200400246

VARIETY NAME PS 06575293 PER LETTER DATED 9/21/07

EXPERIMENTAL DESIGNATION SVR5293

Place the appropriate number that describes the varietal character in the boxes below. Place a zero in the first box (eg. [0][9][9] or [0][9]) when number is either 99 or less or 9 or less. Measured data should be the mean of an appropriate number (at least 20) of well spaced plants. Royal Horticultural Society or any recognized color standard may be used to determine plant colors.

The location of the test area is: ARIZONA, CALIFORNIA | Color System Used: ROYAL HORT. SOC.

SPECIFIC VARIETIES USED FOR COMPARISON AS CHECK VARIETIES IN THIS APPLICATION: Use standard regional check varieties which are adapted to your area. One of the comparison varieties must be the most similar variety used in Exhibit B.

Application Variety (a1.) SVR5293 Most Similar Variety (c1.) RED COACH 74

Standard Regional Check Variety (c2.) VANGUARD

1. PLANT TYPE: *(See list of suggested check varieties page 4.)*

01= Cutting/Leaf
02= Butterhead
03= Bibb
04= Cos or Romaine
05= Great Lakes Group
06= Vanguard Group
07= Salinas Group
08= Eastern (Ithaca) Group
09= Stem
10= Latin
11= OTHER (Specify below): _____

(a1.) [06] (c1.) [06] (c2.) [06]

2. SEED:

COLOR (1= White (Silver Grey), 2= Black (Grey Brown), 3= Brown (Amber))
(a1.) [2] (c1.) [2] (c2.) [2]

LIGHT DORMANCY (1= Light Required, 2= Light Not Required)
(a1.) [2] (c1.) [2] (c2.) [2]

HEAT DORMANCY (1= Susceptible, 2= Not Susceptible)
(a1.) [1] (c1.) [1] (c2.) [1]

3. COTYLEDON TO FOURTH LEAF STAGE: NOTE: Provide a color photograph or photocopy of the fourth leaf from 20 day old seedling grown under optimal conditions.

SHAPE OF COTYLEDONS: 1=Broad 2= Intermediate 3= Spatulate

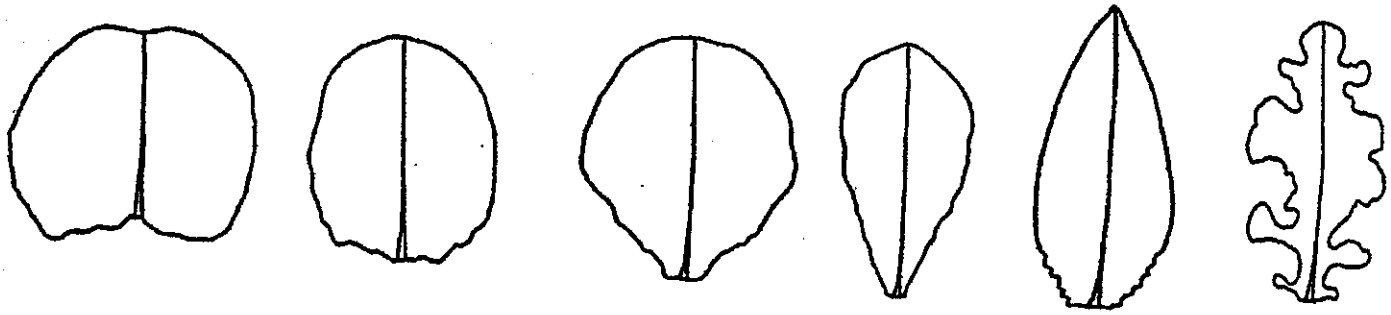
(a1.) [2] (c1.) [2] (c2.) [2]

7

3. **Cotyledon to Fourth Leaf Stage** *(Continued)*

SHAPE OF FOURTH LEAF:

(a1.) [4] (c1.) [4] (c2.) [4]



1. 2. 3. 4. 5. 6.

LENGTH/WIDTH INDEX OF FOURTH LEAF: L/W x 10

(a1.) [21] (c1.) [20] (c2.) [21]

APICAL MARGIN:

1= Entire
2= Crenate/Gnawed
3= Finely Dentate
4= Moderately Dentate
5= Coarsely Dentate
6= Incised
7= Lobed
8= OTHER (Specify below): _____

(a1.) [3] (c1.) [3] (c2.) [3]

BASAL MARGIN: *(Use the options for Apical Margin above)*

(a1.) [4] (c1.) [4] (c2.) [4]

UNDULATION:

1= Flat 2= Slight 3= Medium 4= Marked

(a1.) [2] (c1.) [2] (c2.) [2]

GREEN COLOR:

1=Yellow Green
2= Light green
3= Medium Green
4= Dark Green
5= Blue Green
6= Silver Green
7= Grey Green

(a1.) [3] (c1.) [3] (c2.) [3]

ANTHOCYANIN:

DISTRIBUTION:

1= Absent
2= Margin Only
3= Spotted
4= Throughout
5= OTHER (Specify below): _____

(a1.) [1] (c1.) [1] (c2.) [1]

CONCENTRATION: 1= Light 2= Moderate 3= Intense

(a1.) [-] (c1.) [-] (c2.) [-]

3. **Cotyledon to Fourth Leaf Stage** ***(Continued)***

ROLLING: 1= Absent 2= Present

(a1.) [1] (c1.) [1] (c2.) [1]

CUPPING: 1= Uncupped 2= Slight 3= Markedly

(a1.) [1] (c1.) [1] (c2.) [1]

REFLEXING: 1= None 2= Apical Margin 3= Lateral Margins

(a1.) [1] (c1.) [1] (c2.) [1]

4. **MATURE LEAVES** ***(Observe Harvest-Mature Outer Leaves)*** NOTE: Provide color photo of a harvest-mature leaf which accurately shows color and margin characteristics.

MARGIN:

INCISION DEPTH: *(deepest penetration of the margin)* 1=Absent/Shallow (Dark Green Boston) 2= Moderate (Vanguard) 3= Deep (Great Lakes 659)

(a1.) [1] (c1.) [1] (c2.) [1]

INDENTATION: *(finest divisions of the margin)* 1= Entire (Dark Green Boston) 2= Shallowly Dentate (Great Lakes 65) 3= Deeply Dentate (Great Lakes 659) 4= Crenate (Vanguard) 5= OTHER (Specify): _____

(a1.) [4] (c1.) [4] (c2.) [4]

UNDULATIONS OF THE APICAL MARGIN: 1= Absent/ Slight (Dark Green Boston) 2= Moderate (Vanguard) 3= Strong (Great Lakes 659)

(a1.) [2] (c1.) [2] (c2.) [2]

GREEN COLOR: 1=Very Light Green (Bibb) 2= Light green (Minetto) 3= Medium Green (Great Lakes) 4= Dark Green (Vanguard) 5= Very Dark Green 6= OTHER (Specify): _____

(a1.) [4] (c1.) [4] (c2.) [4]

ANTHOCYANIN:

DISTRIBUTION: 1=Absent 2= Margin Only (Big Boston) 3= Spotted (Calif. Cream Butter) 4= Throughout (Prize Head) 5= OTHER (Specify below): _____

(a1.) [1] (c1.) [1] (c2.) [1]

CONCENTRATION: 1= Light (Iceberg) 2= Moderate (Prize Head) 3= Intense (Ruby)

(a1.) [-] (c1.) [-] (c2.) [-]

4. Mature Leaves *(Continued)*

SIZE: 1= Small 2= Medium 3= Large

(a1.) 3 (c1.) 3 (c2.) 3

GLOSSINESS: 1= Dull (Vanguard) 2= Moderate (Salinas) 3= Glossy (Great Lakes)

(a1.) 1 (c1.) 1 (c2.) 1

BLISTERING: 1= Absent/Slight (Salinas) 2=Moderate (Vanguard) 3= Strong (Prize Head)

(a1.) 2 (c1.) 2 (c2.) 2

LEAF THICKNESS: 1= Thin 2= Intermediate 3= Thick

(a1.) 3 (c1.) 3 (c2.) 3

TRICHOMES: 1= Absent (Smooth) 2= Present (Spiny)

(a1.) 1 (c1.) 1 (c2.) 1

5. **PLANT**

SPREAD OF FRAME LEAVES: (a1.) 45 cm (c1.) 51 cm (c2.) 47 cm

HEAD DIAMETER: *(market trimmed with single cap leaf)*

(a1.) 16 cm (c1.) 17 cm (c2.) 18 cm

HEAD SHAPE : 1= Flattened 2= Slightly Flattened 3= Spherical 4= Elongate 5= Non-Heading 6= OTHER (Specify): _____

(a1.) 3 (c1.) 3 (c2.) 3

HEAD SIZE CLASS: 1= Small 2= Medium 3= Large

(a1.) 3 (c1.) 3 (c2.) 3

HEAD PER CARTON:

(a1.) 24 (c1.) 24 (c2.) 24

HEAD WEIGHT:

(a1.) 1.16 g (c1.) 1118 g (c2.) 1032 g

HEAD FIRMNESS : 1= Loose 2= Moderate 3= Firm 4= Very Firm

(a1.) 4 (c1.) 4 (c2.) 4

6. **BUTT**

SHAPE: 1= Slightly Concave 2= Flat 3= Rounded

(a1.) 3 (c1.) 3 (c2.) 3

MIDRIB: 1= Flattened (Salinas) 2= Moderately Raised 3= Prominently Raised (Great Lakes 659)

(a1.) 2 (c1.) 2 (c2.) 2

7. **CORE**

DIAMETER AT BASE OF HEAD:

(a1.) 32 mm (c1.) 35 mm (c2.) 33 mm

RATIO OF HEAD DIAMETER/CORE DIAMETER:

(a1.) .50 (c1.) .49 (c2.) .55

CORE HEIGHT FROM BASE OF HEAD TO APEX:

(a1.) 48 mm (c1.) 42 mm (c2.) 46 mm

8. **BOLTING** *(Give First Water Date:* 28 APRIL 03*)* NOTE: First Water Date is the date seed first receives adequate moisture to germinate. This can and often does equal the planting date.

NUMBER OF DAYS FROM FIRST WATER DATE TO SEED STALK EMERGENCE (summer conditions):

(a1.) 54 (c1.) 52 (c2.) 64

BOLTING CLASS: 1= Very Slow 2= Slow 3= Medium 4= Rapid 5= Very Rapid

(a1.) 3 (c1.) 3 (c2.) 3

HEIGHT OF MATURE SEED STALK:

(a1.) 127 cm (c1.) 125 cm (c2.) 130 cm

SPREAD OF BOLTER PLANT: (at widest point)

(a1.) 62 cm (c1.) 68 cm (c2.) 62 cm

BOLTER LEAVES: 1= Straight 2= Curved

(a1.) 1 (c1.) 1 (c2.) 1

MARGIN: 1= Entire 2= Dentate

(a1.) 2 (c1.) 2 (c2.) 2

8. **Bolting** ***(Continued)***

COLOR: 1= Light Green 2= Medium Green 3= Dark Green

(a1.) [3] (c1.) [3] (c2.) [3]

BOLTER HABIT:

TERMINAL INFLORESCENCE: 1= Absent 2= Present

(a1.) [2] (c1.) [2] (c2.) [2]

LATERAL SHOOTS: 1= Absent 2= Present

(a1.) [2] (c1.) [2] (c2.) [2]

BASAL SIDE SHOOTS: 1= Absent 2= Present

(a1.) [1] (c1.) [1] (c2.) [1]

9. **MATURITY** *(earliness of harvest-mature head formation)*
NOTE: Complete this section for at least one season.

SEASON	APPLICATION VARIETY no. of days[1]			MOST SIMILAR VARIETY no. of days[1]			STANDARD REGIONAL CHECK VARIETY no. of days[1]		
Spring									
Summer									
Fall									
Winter		8	4		8	8		8	7

Give planting date(s) and location(s):

Spring: _____

Summer: _____

Fall: _____

Winter: 4 NOV 03, 11 NOV 03 YUMA, AZ

1. First Water Date to Harvest

10. **ADAPTATION:**

PRIMARY REGIONS OF ADAPTATION (tested and proven adapted): 0= Not Tested 1= Not Adapted 2= Adapted)

[2] Southwest (CA and/or AZ desert) [0] West Coast [0] Northeast

[0] North-central [0] Southeast [0] OTHER (Specify): _____

SEASON:

[2] Spring (Area ARIZONA, CALIFORNIA) [1] Fall (Area ARIZONA, CALIFORNIA)

[1] Summer (Area ARIZONA, CALIFORNIA) [2] Winter (Area ARIZONA, CALIFORNIA)

[0] **GREENHOUSE:** 0= Not Tested 1= Not Adapted 2= Adapted

[1] **SOIL TYPE:** 1= Mineral 2= Organic 3= Both

11. VIRAL DISEASES
1= Immune 3= Resistant 5= Moderately Resistant/Moderately Susceptible 7= Susceptible 9= Highly Susceptible

Big Vein	(a1.)	5	(c1.)	7	(c2.)	7
Lettuce Mosaic	(a1.)		(c1.)		(c2.)	
Cucumber Mosaic	(a1.)		(c1.)		(c2.)	
Tomato Bushy Stunt, cause of dieback	(a1.)		(c1.)		(c2.)	
Turnip Mosaic	(a1.)		(c1.)		(c2.)	
Beet Western Yellows	(a1.)		(c1.)		(c2.)	
Lettuce Infectious Yellows	(a1.)		(c1.)		(c2.)	
OTHER (Specify):_____	(a1.)		(c1.)		(c2.)	

12. FUNGAL/BACTERIAL DISEASES
1= Immune 3= Resistant 5= Moderately Resistant/Moderately Susceptible 7= Susceptible 9= Highly Susceptible

Corky Root Rot	(a1.)		(c1.)		(c2.)	
(Races:_____)						
Downy Mildew	(a1.)		(c1.)		(c2.)	
(Races:_____)						
Powdery Mildew	(a1.)		(c1.)		(c2.)	
Sclerotinia Drop	(a1.)		(c1.)		(c2.)	
Bacterial Soft Rot (*Pseudomonas* spp. and others)	(a1.)		(c1.)		(c2.)	
Botrytis (Grey Mold)	(a1.)		(c1.)		(c2.)	
Verticillium Wilt	(a1.)		(c1.)		(c2.)	
Bacterial Leaf Spot	(a1.)		(c1.)		(c2.)	
Anthracnose	(a1.)		(c1.)		(c2.	
OTHER (Specify):_____	(a1.)		(c1.)		(c2.)	

13. INSECTS
1= Immune 3= Resistant 5= Moderately Resistant/Moderately Susceptible 7= Susceptible 9= Highly Susceptible

Cabbage Loopers	(a1.)		(c1.)		(c2.)	
Root Aphids	(a1.)		(c1.)		(c2.)	
Green Peach Aphid	(a1.)		(c1.)		(c2.)	
Lettuce Aphid	(a1.)		(c1.)		(c2.)	
Pea Leafminer	(a1.)		(c1.)		(c2.)	
OTHER (Specify):_____	(a1.)		(c1.)		(c2.)	

14. PHYSIOLOGICAL STRESSES
1= Immune 3= Resistant 5= Moderately Resistant/Moderately Susceptible 7= Susceptible 9= Highly Susceptible

Tipburn	(a1.)	5	(c1.)	5	(c2.)	5
Heat	(a1.)	7	(c1.)	7	(c2.)	5
Drought	(a1.)		(c1.)		(c2.)	
Cold	(a1.)	5	(c1.)	5	(c2.)	5
Salt	(a1.)		(c1.)		(c2.)	
Brown Rib (Rib Discoloration, Rib Blight)	(a1.)		(c1.)		(c2.)	
OTHER (Specify):_____	(a1.)		(c1.)		(c2.)	

15. POSTHARVEST STRESS

1= Immune 3= Resistant 5= Moderately Resistant/Moderately Susceptible 7= Susceptible 9= Highly Susceptible

Pink Rib	(a1.)	☐	(c1.)	☐	(c2.)	☐
Russet Spotting	(a1.)	☐	(c1.)	☐	(c2.)	☐
Rusty Brown Discoloration	(a1.)	☐	(c1.)	☐	(c2.)	☐
Internal Rib Necrosis (Blackheart, Grey Rib, Grey Streak)	(a1.)	☐	(c1.)	☐	(c2.)	☐
Brown Stain	(a1.)	☐	(c1.)	☐	(c2.)	☐

16. BIOCHEMICAL OR ELECTROPHORETIC MARKERS

17. COMMENTS

Suggested Check Varieties

	TYPE	CHECK VARIETY
1	Cutting/Leaf	Waldmann's Green
2	Butterhead	Dark Green Boston
3	Bibb	Bibb
4	Cos or Romaine	Parris Island
5	Great Lakes Group	Great Lakes 659-700
6	Vanguard Group	Vanguard
7	Salinas Group	Salinas
8	Eastern Group	Ithaca
9	Stem	Celtuce
10	Latin	Little Gem

REFERENCES

Bowring, J.D.C., 1969. "The Identification of Varieties of Lettuce (*Lactuca sativa* L.)". Journal of the National Institute of Agricultural Botany 11:499-520. National Institute of Agricultural Botany, Cambridge, UK

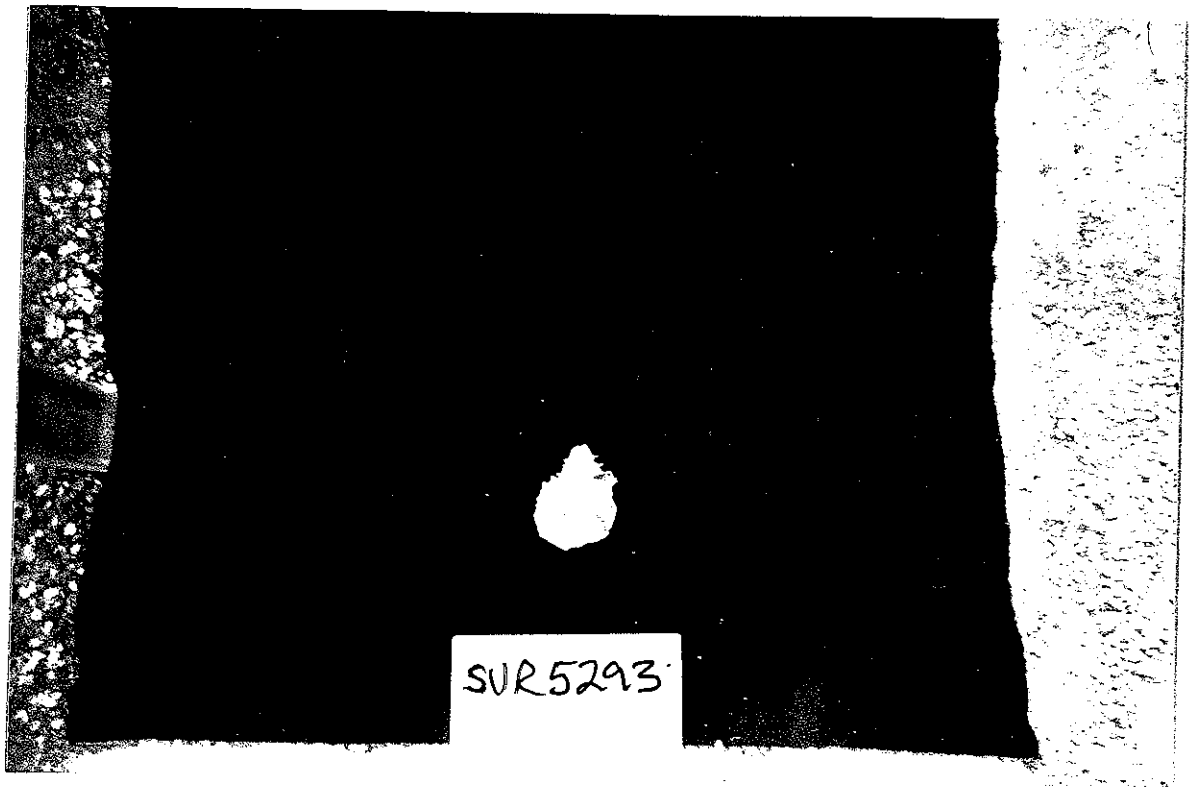
Davis, R.M., K.V. Subbarao, R.N. Raid, and E.A. Kurtz., 1997. "Compedium of Lettuce Diseases". APS Press, St. Paul, MN

Michelmore, R. W., J. M. Norwood, D. S. Ingram, I. R. Crute and P. Nicholson. 1984. The inheritance of virulence in *Bremia lactucae* to match resistance factors 3, 4, 5, 6, 8, 9, 10 and 11 in lettuce (*Lactuca sativa*). Plant Pathology 32:176-177.

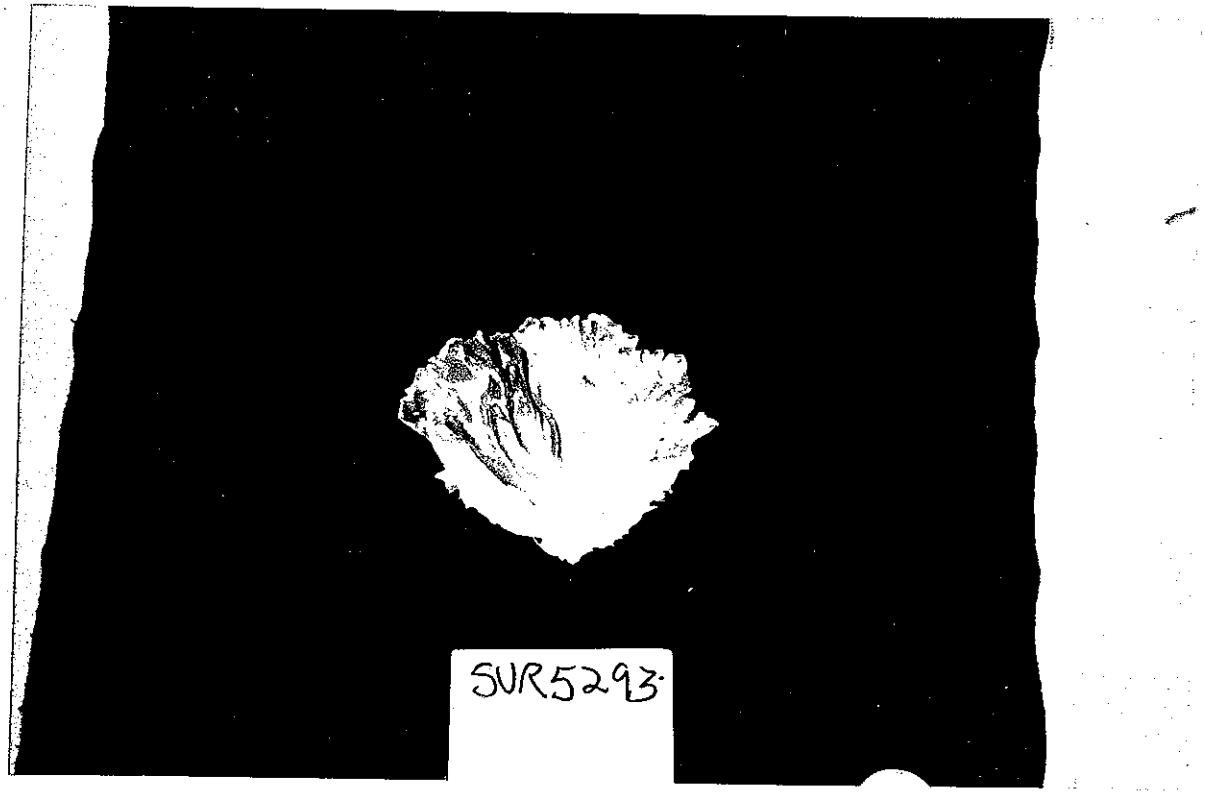
Norwood, J. M., R. W. Michelmore, I. R. Crute and D. S. Ingram. 1983. "The inheritance of specific virulence of *Bremia lactucae* (Downy mildew) to match R-factors 1, 2, 4, 6 and 11 in lettuce (*Lactuca sativa*)". Plant Pathology 32:176-177.

Rodenburg, C.M., et al., 1960. "Varieties of Lettuce. An International Monograph," Instituut voor de Verdeling van Tuinbouwgewassen (IVT), Wageningen, NL

Ryder, E.J., 1999. "Lettuce, Endive and Chicory". CABI Publications, Wallingford, UK



Fourth leaf from 20-day old seedlings, SVR 5293



Harvest –mature leaf, SVR 5293

REPRODUCE LOCALLY. Include form number and edition date on all reproductions. FORM APPROVED - OMB No. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

Application is required in order to determine if a plant variety protection certificate is to be issued *(7 U.S.C. 2421)*. The information is held confidential until the certificate is issued *(7 U.S.C. 2426)*.

1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME
Seminis Vegetable Seeds, Inc.	PS 06515293	PER LETTER LMS 9/21/07 PS 06575293
4. ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP, and Country)*	**5. TELEPHONE** *(Include area code)*	**6. FAX** *(Include area code)*
2700 Camino del Sol Oxnard, CA 93030-7967	(805) 647-1572	(805) 918-2545
	7. PVPO NUMBER 200400246	

8. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. **If no, please explain.** ☑ **YES** ☐ **NO**

9. Is the applicant (individual or company) a U.S. national or a U.S. based company? **If no, give name of country.** ☑ **YES** ☐ **NO** RAD 9/23/07

10. Is the applicant the original owner? ☑ **YES** ☐ **NO** **If no, please answer one of the following:**

a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)?
☐ **YES** ☐ **NO** **If no, give name of country**

b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?
☐ **YES** ☐ **NO** **If no, give name of country**

11. Additional explanation on ownership *(Trace ownership from original breeder to current owner. Use the reverse for extra space if needed)*:

The variety named in this application was developed by the Seminis Vegetable Seeds, Inc., employee (breeder) named below. Unless otherwise stated, all rights to the varieties developed by Seminis Vegetable Seeds, Inc. are assigned to the Company by agreement or by operation of law. No rights to such invention, discovery or development are retained by the employee(s).

Employee (Breeder): Bill Waycott

Site Location: Arroyo Grande, CA

PLEASE NOTE:

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.

2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.

3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.